## FIRST REPORT OF MICROPHOLIS POLITA (SAPOTACEAE) AND HAMELIA VENTRICOSA (RUBIACEAE) FROM HISPANIOLA

## Walter S. Judd

Judd, W. S. (University of Florida, Department of Botay, 220 Bertram Hall, Gainesville, FL 32611). First report of *Micropholis polita* (Sapotaceae) and *Hamelia ventricosa* (Rubiaceae) from Hispaniola. Moscosoa 4: 222-225. 1986. Micropholia polita (Griseb.) Pierre subsp. hotteana subsp. nova, (Sapotaceae), and *Hamelia ventricos* Sw. (Rubiaceae) are reported for the first time from Hispaniola, the collections of the former representing a new subspecies. Both taxa were collected in the Massif de la Hotte, southwestern Haiti, and occur in the floristically diverse moist forests on limestone on the southern slope of Morne Formon and in the adjacent Bois Formon region.

Primer reporte de Micropholis políta (Sapotaceae) y Hamelia ventricosa (Rubiaceae) en la isla Española, por W S. Judd. Se recolectaron Micropholis polita subsp. hotteana subsp. nov. y Hamelia ventricosa Sw. por primera vez en el Massif de la Hotte en el sudoeste de Haití, una zona de bosques húmedos y diversos, sobre roca calcárea en la ladera del sur de Morne Formon y en la región de Bois Formon.

The flora of the Morne Formon/Pic Macaya region of the Massif de la Hotte in southwestern Haiti is diverse and highly endemic (Ekman, 1928; Howard, 1973; Judd, manuscript), but is one of the most poorly known of the island. The natural history of the Massif de la Hotte has been outlined briefly by Dod (1984). The most important collector in this region was Erik L. Ekman, who collected on Morne Formon from December 1926 to January 1927 (Ekman, 1928, and unpublished field notes). Ekman again collected in the high elevations of the Massif de la Hotte (Morne la Hotte, above Les Roseaux) in September of 1926, and Leslie R. Holdridge botanized on Morne Macaya in February, 1941. The author and James D. Skean, Jr. were able to conduct ca. six weeks of field work in January/February and June, 1984, in the Morne Formon/Pic Macaya region as part of a survey of the flora and fauna of the recently established Parc National Pic Macaya. During this study the following angiosperm species were collected, and are here reported for the first time from Hispaniola.

MICROPHOLIS POLITA (Griseb.) Pierre, (Sapotaceae). HAITI: Departement du Sud: Massif de la Hotte, Parc National Pic Macaya, southern slopes of Morne Formon, and Bois Formon, i.e., woods in vicinity of community of Formon, moist forest on limestone, 950-1250 m alt., locally common, 23 January 1984 (sterile), *Walter S. Judd 3435* (A, EHH, JBSD), 30 January 1984 (fruiting), Walter S. Judd 3927 (FLAS, NY, S).

HAMELIA VENTRICOSA Sw., (Rubiaceae). HAITI: Departement du Sud: Massif de la Hotte, Parc National Pic Macaya, Bois Formon, moist forest on limestone, ca. 950-1050 m alt. uncommon, 2 June 1984 (flowering), James D. Skean, Jr. 1226 (EHH, FLAS).

Micropholis polita was previously considered to be endemic to the Oriente region of Cuba (Cronquist, 1946; Alain, 1957). Ekman (1928) considered the flora of the La Hotte region to be more similar to that of Cuba than any other mountainous region of Hispaniola, and the discovery of this species further supports the affinity of the floras of the Massif de la Hotte and Cuba (especially Oriente). Taxa with distributions limited to Cuba and Hispaniola that were recently collected in Parc Macaya include: Bombacopsis emarginata (A. Rich.) A. Robyns, Forsteronia corymbosa (Jacq.) G. Meyer, Gyrotaenia myriocarpa Griseb., Lantanopsis hispidula Wright ex Griseb., Lobelia robusta Graham var. robusta, Persea anomala Britt. & Wils. (incl. P. ekmanii O. C. Schmidt), Pithecellobium oppositifolium Urb., Rajania ovata Sw. and Pachyanthus cubensis A. Rich.

It is of interest that E. L. Ekman also collected *Micropholis polita* in the Massif de la Hotte (*Ekman H5218*, S!, northern slope of Morne Vandervelde, ca. 900 m, in the vicinity of Camp Perrin). Urban identified this specimen as *M*. valde aff. *polita*, and it is listed as such in Ekman's field notes. However, this sterile collection was considered by Cronquist (1946) to probably represent an undescribed species allied to *M*. *chrysophylloides* Pierre.

The Haitian specimens consistently differ from Cuban material of M. polita in their slightly narrower leaves, i. e., 3-12.5 cm long, 0.6-3.3 cm wide, and (2.7-) 3-4.5 times as long as wide (vs. 5-13 cm long, 2-5 cm wide, and 2-3 (-3.3) times as long as wide), which are narrowly elliptic to oblong or occasionally narrowly ovate (vs. elliptic to broadly elliptic or obovate). However, the Haitian collections resemble Cuban specimens of M. polita by possessing distinctly acuminate, obscurely striate leaves, which at maturity are usually nearly glabrous abaxially, as well as similar fruits that are ca. 2-3 cm in diameter. These characters contrast with M. chrysophylloides, which has leaves that are finely sericeous/golden beneath, obscurely veined, broader in relation to their length, and obtuse to abruptly acuminate at the apex, and smaller fruits that are usually less than 1.5 cm in diameter. Thus the specimens of Micropholis from the Massif de la Hotte, Haiti, are considered to represent a distinct morphological/geographical subspecies of M. polita: M. polita subsp. hotteana Judd.<sup>1</sup> As indicated above, subspecies hotteana is distinguished from subsp. polita by the shape and length/width quotient of its leaves. Clearly, additional field work is needed in the Massif de la Hotte, since flowering specimens of M. polita subsp. hotteana have not been collected.

<sup>1.</sup> Subspecies haec ab Micropholis polita (Griseb.) Pierre subsp. polita differt foliis plerumque anguste ellipticis vel oblongis, leviter angustioribus, i.e., o.6-3.3 cm vs. 2- 5 cm latis, longitudinibus plerumque 3-vel 4.5-plo latitudinibus vs. 2-vel 3-plo latitudinibus. TYPE; W. S. Judd 3927 (holotype: FLAS; isotypes: NY, S). Fig. 1.

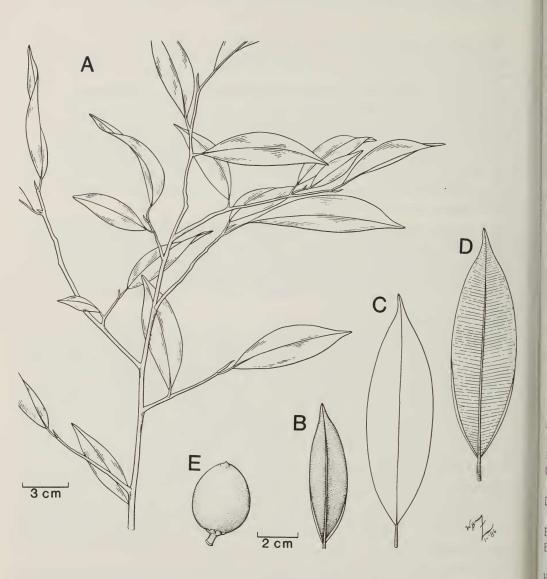


Figure 1. Micropholis polita subsp. hotteana: Judd, subsp. nov. A. habit Judd 3435); B-D, leaves (Judd 3435), B, abaxial surface of young leaf showing dense indumentum, C. adaxial surface of mature leaf, D, abaxial surface of mature leaf; E. fruit (Judd 3927).

Hametia ventricosa was previously considered to be endemic to Jamaica, where it occurs in wet woodlands on limestone from 245 to 700 m (Adams, 1972). The Haitian collections clearly fit *H. ventricosa* (as known from Jamaican populations) in their subulate-hornlike stipules (to 7 mm long), attenuate leaf bases, acute calyx lobes, and elongate-campanulate and basally constricted corollas with broad lobes; thus these specimens are referred to this species. However, the corolla tube in the La Hotte material is only ca. 3-3.5 mm long. This is slightly shorter than is typical for *H. ventricosa*, and approaches that of *H. cuprea* Griseb., a related species already known from the Massif de la Hotte (see Elias, 1976). An associated species showing a similar distribution is *Comocladia pinnatifolia* L.

## Acknowledgements

I thank Dr. Charles Woods, of the Florida State Museum, coordinator and principal investigator of the U.S.A.I.D. sponsored project, *Biogeophysical Inventory of the National Parks of Haiti*, who organized the field trips to the Massif de la Hotte. Thanks are also due James D. Skean, Jr., who assisted in the collection of the plants of this region, and made helpful suggestions concerning the manuscript. I am grateful to the curatorial staff of the herbaria of the Arnold Arboretum and Gray Herbarium for their asistance during a visit to that institution, and to the curators of the herbaria of the New York Botanical Garden (NY) and the Swedish Museum of Natural History (S) for their loans of comparative material. I thank Wendy Zomlefer for preparing the illustration of *Micropholis polita subsp.* hotteana.

## References

- Adams, C. D. 1972. Flowering plants of Jamaica. 848 pp. The University of the West Indies, Mona, Jamaica, R. MacLehose & Co., The Univ. Press, Glasgow.
- Alain, Hno. 1957. Flora of Cuba. Vol. 4. Ocas. Mus. Hist. Nat. Col. La Salle 8: 1-441.
- Cronquist, A. 1946. Studies in the Sapotaceae II. Survey of the North American genera. Lloydia 9: 241-292.
- Dod, D. D. 1984. Massif de la Hotte, isla peculiar: orquideas nuevas iluminan su historia. Moscosoa 3:91-99.
- Ekman, E. L. 1928. A botanical excursion in La Hotte, Haiti. Svensk. Bot. Tidsk. 22: 200-219.
- Elias, T. S. 1976. Monograph of the genus *Hamelia* (Rubiaceae). Mem. N. Y. Bot. Gard. 26: 81-144.
- Howard, R. A. 1973. The vegetation of the Antilles, pp. 1-38 in A. Graham (ed.) 1973. Vegetation and vegetational history of northern Latin America. Elsevier Scientific Publ. Co., Amsterdam.